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The right to a healthy online environment: Corporate food advertising, digital platform regulation and algorithmic determinants of health

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Abstract: Recent developments in platform governance have empowered regulators to require platforms to take down harmful and unlawful content such as the live streaming of violence and child sexual abuse material. However, platform responsibility for content that is health-demoting but not criminal or violent has been relatively neglected. This paper focuses on how platforms create advertising environments that promote unhealthy diets, which we label an ‘algorithmic determinant of health’. We propose a human rights-based approach (HRBA) to digital platform regulation that would require both governments and platforms to protect individuals from health demoting flows of food marketing content online. We use our HRBA to review the policies of twelve major advertiser-funded digital platforms regarding food marketing. We conclude they do not comply with platforms’ human rights obligations. Accordingly, governments should regulate platforms’ online advertising. We argue that initiatives like the UK Online Safety Act are too narrow for this purpose, and that the imposition of a digital duty of care on platforms, such as seen in the EU Digital Services Act, is a more promising step. While applied to food marketing in this paper, our HRBA is relevant to other health demoting marketing content online such as gambling and alcohol.

Introduction

Recent developments in platform governance, such as the UK’s Online Safety Act (‘OSA’) and EU’s Digital Services Act (Regulation 2022/2065, ‘DSA’), have empowered regulators to require platforms to take down content that raises acute safety concerns such as the live streaming of violence, child sexual abuse material, and other violent or criminal content (Law, 2024). However, the responsibility of platforms for online feeds rife with content that is health-demoting but does not consist of any individual items that represent an immediate and acute threat to personal safety, have been relatively neglected by policy makers. As the digital – and automated or artificial intelligence – economy becomes an increasingly significant driver of global economic growth, it is crucial to scrutinise how digital transformations intertwine, reinforce and amplify commercial imperatives to influence individual and community health (Kickbusch & Holly, 2023, p. 2). In this paper we focus particularly on platforms’ responsibility for advertising environments that promote unhealthy diets.

By ‘unhealthy diets’, we mean diets characterised by foods high in fat, sugar or salt (HFSS), and/or industrially formulated (‘ultra processed’) foods.¹ There is now considerable evidence that these foods are displacing whole foods and minimally processed foods in individual and population diets, which is significantly contributing to cardiovascular disease, diabetes and certain types of cancer (Dicken et al., 2025; Monteiro et al., 2019; Van Tulleken, 2024). As a result, most countries’ di-

1. There is disagreement between different scholars and policy advocates as to how best to define the food that characterise unhealthy diets, with HFSS being the older approach. Ultra-processed foods or ‘UPF’ is a newer conceptualisation developed by Brazilian researchers (Monteiro et al., 2012). It covers food products that are considered unhealthy due to extensive processing and the inclusion of ingredients such as preservatives, emulsifiers and artificial sweeteners. For the purposes of this paper it is not necessary to decide between these definitions.

etary guidelines recommend individuals limit their consumption of these foods, although precise definitions and quantifications vary considerably (Camara et al., 2021).

Globally the trend towards unhealthy diets is driven by structural economic and cultural factors, including the commercial imperatives of the transnational food corporations that produce and market HFSS and ultra processed foods (Baker et al., 2025). It is well established that frequent exposure to commercial food marketing influences dietary preferences and consumption habits, particularly in children and young people (Boyland et al., 2022; WHO, 2016; WHO, 2022). The marketing activities of these firms is therefore a significant 'commercial' determinant of health that is a private sector activity that affects people's health directly or indirectly (Mofo-keng, 2023, p. 7). Some governments have now adopted the recommendations of researchers and international agencies that it is necessary to restrict the commercial marketing of HFSS or ultra processed foods and food brands (described further below in Part 4). These respond to evidence that traditional mechanisms using dietary guidelines and nutrient labelling on packs are not sufficient to 'nudge' individuals, especially children and young people, to develop healthy dietary habits free of excessive commercial influence (Northcott et al., 2025a, see also Scrinis & Parker, 2016).

However, the impact of online marketing on dietary choices has been comparatively neglected. Digital environments now significantly influence access to health information and advice, especially for those who lack access to other information or are excluded from mainstream health support services (Kickbusch & Holly, 2023). But platforms and their algorithmic affordances can also amplify misleading health information, promote unproven therapeutic products and facilitate marketing by health-harming industries such as alcohol, gambling, and tobacco, including to children, youth and other vulnerable people (Goodwin, 2022; Kelly et al., 2021; Robards et al., 2023). Their powerful data analytics and dynamic algorithmic recommendation systems can themselves act as a health-demoting 'hypernudge', a term coined by Karen Yeung (2018) to describe the way that platforms' algorithmic processes shape individuals' choice architecture in ways that they cannot understand or control.

This paper focuses on the intersection of commercial and digital determinants of health in online food marketing (Zenone et al., 2023), which we label an algorithmic determinant of health.

Since algorithmic advertising is the primary revenue source of major digital plat-

forms, it can have a significant impact on how healthy the online environment is (as we describe in more detail at section 3.1). The two largest advertiser-funded digital platforms, Alphabet (Google) and Meta (Facebook, Instagram), dominate online advertising through their own platforms and beyond (Lyons et al., 2022; Mackenzie et al., 2023; Zenone et al., 2023). The promotion of HFSS and ultra processed foods in both sponsored advertising and user generated ‘influencer’ content is ubiquitous on these and other advertiser-funded platforms including Facebook (Northcott et al., 2025b; Robards et al., 2023), YouTube (Valero-Morales et al., 2023), TikTok (Brooks et al., 2022) and Twitch (Evans et al., 2024). While food brands are (rightly) called out as responsible for marketing strategies that ‘detrimentially influence dietary decisions’ (Fakhri, 2025, para. 15), the major advertiser-funded platforms also contribute substantially and significantly to health-demoting marketing online. These platforms’ advertising infrastructures facilitate, accentuate and escalate the unhealthy marketing strategies of the food industry through their unprecedented collection and use of data and automated ad placement technologies (Sing & Lyons, 2024). Over and above platforms’ role in enabling food brands’ marketing strategies, algorithmic advertising and content curation are responsible for an additional layer of marketing harm. They do so by creating tuned flows of advertisements and marketing content (Carah et al., 2024; Brown et al., 2024) from different food brands and influencers that are sequenced, cumulated and subjectively addressed to individuals (e.g. Northcott et al., 2025b, Figure 2), creating a health demoting online environment.

This paper uses the well-established international law method of developing a human rights-based approach (HRBA) to a policy issue (see Egan, 2018) to propose a HRBA for the regulation and governance of digital advertising aimed at addressing algorithmic determinants of health. This HRBA can be used to evaluate, critique and guide how governments should regulate platforms to protect individuals from online marketing that promotes unhealthy diets, building on existing commitments to restricting food marketing to promote healthy diets in traditional media. It can also be used to guide, and hold accountable, platforms’ responsibility to exercise due diligence to prevent health demoting online environments. It is well known that states often fail to comply with their human rights obligations, and that international human rights law does not bind corporations at all (Joseph & Kyriakakis, 2023). Nevertheless, human rights is accepted as a legitimate normative framework that can be used by individuals, civil society and advocacy movements to make demands on governments and corporations for both incremental and transformational change (Moyn, 2018; Skarstad, 2024).

The second part of the paper summarises the HRBA method and sets out the three elements of our HRBA: that under international human rights law, specifically the right to health, states have obligations to protect individuals from health demoting marketing online by restricting and regulating corporate marketing that promotes unhealthy diets; platforms have matching responsibilities under emerging international 'soft law' to exercise due diligence to avoid creating and continuing platform policies that contribute to or cause health demoting online flows of commercial content and to use their leverage to prevent or mitigate food brands' health-demoting marketing practices; and, relevant general human rights principles beyond the right to health should guide how these responsibilities are implemented.

The third part uses the criteria established by the HRBA to evaluate the way in which twelve major advertiser-funded platforms govern food marketing. We show that six of the twelve platforms have no publicly available policies with respect to health demoting advertising by food brands, and the six that do inadequately use their leverage to ensure food brands do not engage in marketing in breach of the human right to health. None have any publicly available policy addressing the way that their own algorithmic advertising practices enable, facilitate, accentuate and cumulate food brands' marketing practices to create health demoting flows of on-line content.

The fourth part uses the HRBA to argue that government restrictions on online marketing by unhealthy food brands, such as those recently legislated in the UK (The Advertising (Less Healthy Food Definitions and Exemptions) Regulations 2024), are justified by human rights law, but do not go far enough to address platform responsibilities above and beyond food industry responsibilities. A regulatory measure more consistent with our HRBA would be the imposition of a digital duty of care on platforms to respect and protect a healthy food environment. We consider the differing approaches taken to legislating a digital platform duty of care by the UK Online Safety Act (OSA) and the EU Digital Services Act (DSA) and conclude that the UK OSA's safety-focused approach is too narrow, while the EU DSA's risk assessment and mitigation approach is more promising, despite significant limitations.

Human rights-based approach to regulating and governing online food marketing

2.1 HRBA Method

While international human rights law has been extensively applied to critiquing, guiding and developing online platform regulation and governance, previous accounts have focused largely on civil and political rights such as the rights to freedom of expression, privacy and non-discrimination, and the principles of transparency and accountability (e.g. Aswad, 2018; Benesch, 2020). By contrast, our HRBA draws attention to the relevance to online platform regulation of the economic, social and cultural human rights. A HRBA is grounded in, and operationalises for a particular context, international human rights law. Within human rights legal scholarship and among international institutions, a HRBA is a conceptual framework for developing and evaluating interventions using international human rights standards, their corresponding state duties, and related principles (Patterson, 2024; UNDG, 2003). It entails reviewing relevant human rights laws and interpretative texts, identifying relevant human rights standards, duties and principles for that specific area based on relevance and considering how those components can be met. In our HRBA for online platform food advertising we focus on the human right to health given our focus on diets, and the emerging international ‘soft law’ governing businesses’ human rights obligations given our focus on platforms.

To create a HRBA for the regulation and governance of online food marketing, we took the following steps:

First, we used the UN Declaration of Human Rights and the subsequent nine UN human rights treaties, most significantly the International Covenant on Economic, Social and Cultural Rights (‘ICESCR’) to identify the international human right most relevant to online food advertising. We then reviewed authoritative interpretative materials regarding the right to health and other relevant rights, including the right to food, rights of the child and right to culture. In these materials, we focused on how marketing was discussed and how states’ obligations were interpreted. We then focused on states’ obligation to ‘protect’ individuals by preventing third parties (in this case food businesses and digital platforms) from violating their rights. States also have obligations to ‘respect’ human rights in their own actions, and to ‘fulfil’ human rights by creating environments to enable the realisation of rights. We do not address these in this paper as our focus is on commercial platform advertising.

Second, we used the United Nations Guiding Principles on Business and Human Rights ('Guiding Principles'), unanimously endorsed by the UN Human Rights Council in 2011, to identify the obligations of online platforms to 'respect' these human rights (Ruggie, 2011). The Guiding Principles address the fact that while business enterprises, and especially transnational corporations, are not officially bound by human rights law, they can have significant impacts on the enjoyment of human rights. Although the Guiding Principles are non-binding and rely largely on self-regulatory 'due diligence', they are increasingly recognised as 'authoritative soft law' at the international level (Macchi & Bright, 2020, p. 240; McCorquodale & Nolan, 2021). They have also influenced the creation of domestic human rights due diligence legislation in several jurisdictions (Assenza, 2024). As the UN Special Rapporteur on the right to food has recently explained, this means that,

'Corporations must conduct periodic human rights due diligence assessments to identify concerns and adjust their conduct... [This] is not simply a procedural duty – what matters is the human rights impact and the actions taken to avert or address the risk, and not the degree of diligence exercised or the degree of negligence. In other words, conducting due diligence will not absolve corporations of responsibility. At a minimum, corporations directly linked to human rights impacts must exercise leverage or consider terminating their activities or relationships. Failure to act accordingly may give rise to liability' (Fakhri, 2025, para. 72).

Both states and businesses also have responsibilities to provide remedies to people who have had their human rights violated. Remedies include, but are not restricted to, financial and non-financial compensation or guarantees of non-repetition and requires the establishment of judicial and non-judicial avenues for complaint, decision and reparation (OHCHR, 2024). We do not address the question of what remedies are relevant when platforms breach their responsibilities in this paper and instead focus on platforms' positive responsibilities.

Third, a HRBA requires that states and businesses adopt a good governance approach consistent with general human rights principles. We use the UN Food and Agricultural Organization's (FAO) PANTHER framework (Gomez, 2014) to identify the general human rights principles for state regulation of platforms and platform governance in relation to online food marketing. The PANTHER framework is a list of widely accepted human rights principles drawn from human rights instruments that the FAO uses to guide decision-making that aligns with the human right to adequate food. The PANTHER principles include: participation, accountability, non-

discrimination, transparency, human dignity, empowerment and rule of law. These principles should inform the process for developing regulation of or by platforms and the rules within the regulations themselves.

Consistent with the indivisibility principle in human rights law, which necessitates a balancing approach where rights conflict, we also considered the need to balance any restriction on food marketing with freedom of expression (discussed below). The indivisibility of human rights means that state and corporate action that facilitates other human rights can also, indirectly or directly, contribute to achieving those human rights most engaged by a healthier online environment in relation to diets. A key example is the human right to be protected against arbitrary or unlawful interference with privacy, contained in Article 17 of the *International Covenant on Civil and Political Rights*. Stricter control on the collection and use of personal data would contribute to a healthy online environment. However in this paper, we do not further examine other civil and political rights that, if advanced, would mutually reinforce rights associated with health outcomes but these have been discussed elsewhere (e.g. UNICEF, 2018; Sing & Backholer, 2023; Sing & Lyons, 2024; Goldenfein et al., 2021).

2.2 Elements of proposed HRBA

Using the method described above, we identify three elements of an HRBA to state regulation and platform governance of commercial online food marketing.

State obligations

Article 12(1) of the ICESCR recognises ‘the right of everyone to the enjoyment of the highest attainable standard of physical and mental health’. Health is understood as not just the absence of disease, but also ‘a right to the enjoyment of a variety of facilities, goods, services and conditions necessary for the realization of the highest attainable standard of health’ (CESCR, 2000, p. 3, cl. 9). Thus, state obligations to individuals’ right to health extends beyond medical materials or services to the underlying determinants of health ‘such as food and nutrition...and a healthy environment’ (CESCR, 2000, p. 2, cl. 4). Moreover, the right to health requires states to ‘take positive measures that enable and assist individuals and communities to enjoy the right to health’ including by promoting the right to health by, among other things, ‘supporting people in making informed choices about their health’. (CESCR, 2000, p. 14, cl. 37). The Committee for the ICESCR has commented that the broader human rights obligation on states to protect ‘sometimes necessitates direct regulation and intervention’ and so ‘states parties should

consider measures such as restricting marketing and advertising of certain foods and services in order to protect public health' (CESCR, 2017, p. 6, cl. 19).

States are therefore required to regulate and restrict the actions of corporations including their engagement with, and dissemination of, food marketing that contribute to an overall health demoting online environment (see also Reeve & Magnusson, 2024). This is because such marketing influences individuals to regularly make dietary choices that are not health promoting and when making such choices the individuals are not informed of all the relevant information, such as healthier alternatives or the long-term impact of a consistently unhealthy diet.

Other human rights support this interpretation. Although the right to adequate food has generally not been interpreted in a way that supports states taking proactive steps to ensure healthy food environments, the right to health and the right to food are closely related. The former Special Rapporteur on the Right to Food has proposed the need for states to regulate and enter a treaty to 'protect individuals from the negative health and nutrition effects of highly processed foods' (Elver, 2016, para. 99). The right to culture also supports restrictions on marketing. The Special Rapporteur on the Right to Culture has critiqued the dominance of commercial marketing including the shift to online advertising, the use of online behavioural targeting and other data-fied, algorithmic techniques (Shaheed, 2014, paras. 26, 27), and the promotion of detrimental products including food advertising that promotes an unhealthy diet (Shaheed, 2014, paras. 48-53). In response the Special Rapporteur recommended measures to reduce the total level of commercial marketing all people receive on a daily basis and to protect children from commercial advertising (Shaheed, 2014, para. 104). In relation to food and health, this would support restrictions on marketing content that promotes unhealthy diets.

A growing body of institutional and scholarly work recognises that the human rights of children, and in particular the Convention on the Rights of the Child (CROC), require restricting and regulating online food advertisements that promote unhealthy diets because of the vulnerable nature of children (UNICEF, 2018; WHO & UNICEF, 2023; see also Reeves & Magnusson, 2024; Sing & Lyons, 2024; Tallon-Golden & Garde, 2020). For instance, the Committee on the Rights of the Child has interpreted the right to health in CROC as requiring states to regulate marketing 'especially when such marketing is focused on children' of foods 'high in fat, sugar or salt, energy-dense and micro-nutrient poor' (CROC, 2013, p. 12, cl. 47). In the United Kingdom (discussed below) the need to protect the human rights of the child has been taken to support general and broad restrictions on all marketing of

HFSS products.

Online platforms' responsibilities

The responsibility to respect human rights, as outlined in the Guiding Principles, requires businesses to 'avoid causing or contributing to adverse human rights impacts through their own activities' (Principle 13(a)) and 'seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business's relationships' (Principle 13(b)). Although this responsibility is non-binding, there is a general expectation that good businesses should and will comply (Kaye, 2022). The corporate responsibility to respect incorporates a unique concept of due diligence (Ruggie & Sherman, 2017) that requires companies to implement systems to identify, prevent, monitor and mitigate adverse 'human rights risks, actual or potential, over the entire life cycle of a project or business activity'. These due diligence systems require practical actions consistent with general human rights and good governance principles, such as consultations with human rights experts and risk assessments, tracing the successfulness of steps taken to mitigate human rights harms, and adjusting the approach where it is not effective (OHCHR, 2009, pp. 14-15). A purely self-regulatory design-based approach would not satisfy these requirements for real world assessment and evaluation of human rights due diligence. These responsibilities apply to all businesses, including both the food brands that place advertisements online, and the platforms that are our focus in this paper.

To fulfil their responsibility to respect human rights, platforms should take steps to identify, prevent, monitor and mitigate the ways in which their own marketing models and algorithmic practices enable, facilitate and accentuate food brands' health-demoting marketing strategies. They should also ensure their policies and practices do not promote and target flows of food advertisements that are health-demoting (by promoting unhealthy diets), nor create an overall unhealthy environment (such as through design features of the platform). In addition to addressing their own activities, platforms should use their leverage over food advertisers to influence their contribution to online environments. Platforms should have policies addressed to food industry advertisers that require them to comply with any laws restricting food marketing and to not use their platforms for health demoting marketing campaigns.

General human rights principles for good regulation and governance

Finally, the measures required of both states and online platforms above must also

comply with general human rights principles. In section 2.1, we detail FAO's PANTHER principles as especially relevant to a HRBA in this context. As indicated in section 2.1, principles such as participation and rule of law, general human rights principles in part centre around providing public accounts of, and avenues for active, free and meaningful participation in, the development of the measures. This approach is also consistent with various rights within the *International Covenant on Civil and Political Rights*.

The requirement that measures to protect individuals comply with general human rights principles also means that provisions such as a total 'ban' or 'pause' on social media for children and young people to protect them from harmful online environments may not be consistent with a HRBA (Stalford & Lundy, 2025). This is because of the significance of digital platforms for access to information and advice that promotes human rights. As such, it may not be proportional to bar children and young people from participating; in other words, the balance may not be struck between conflicting human rights where a complete ban is imposed. Rather human rights principles emphasise participation in and accountability for healthy online environments.

Freedom of expression is engaged by any discussion regarding the regulation of online platforms or food marketing. Regulation that restricts food advertisements may influence the flow of information online where, for example, a food advertisement could be seen as providing information about food options or culture. However, restricting and regulating food marketing to promote the right to health and other human rights is not usually seen as a threat to the freedom of expression for two reasons. First, corporations, such as food brands that market themselves and their products on platforms are not themselves owed human rights. Corporations therefore do not have a right to freedom of expression. Second, commercial food marketing often tends to leave out important health information and provides only limited information about food available to purchase, as opposed to providing information important to the realisation of other human rights (Mofokeng, 2023, para. 76); as a result, food marketing does not generally enliven the right to seek, receive and impart information under the right to freedom of expression.

Do platforms exercise due diligence to respect human rights principles for unhealthy food advertising?

3.1 Algorithmic determinants of health

As outlined in the introduction, the online marketing enabled by digital platforms

creates marketing environments that promote unhealthy diets, both through the amplification of food industry marketing, whether through sponsored advertising or content created by the brands or influencers, and because of the specific features of algorithmic advertising itself, which creates flows of advertisements from different advertisers that cumulate together to create health demoting online environments. This is integral to their business model: Platforms actively work with companies to help them create advertising that is as appealing as possible, and food companies are an important focus given their revenue potential (e.g. Meta, 2024).

Algorithmic advertising can be more manipulative than traditional advertisements (TV, radio, billboards etc.) when it utilises the vast amount of data about user characteristics and behaviours collected by platforms, data brokers and brands (Beauvisage & Mellet, 2023; Crain, 2021). Automated advertising technology is capable of finely targeting and tuning the placement, timing and even the precise tone and content of ads to appeal to individuals and groups, at scale across vast swathes of the population (Brown et al., 2024; Carolan, 2018; Montgomery et al., 2019; Paterson et al., 2022). This might entail promoting fast food and alcohol at times when certain audiences are likely to be watching big matches at home, trips to fast food outlets when busy parents and carers are on weekend sports runs or unhealthy sweet and savoury snacks to young people going out with their friends on a Friday night. Online automated marketing can also potentially track mood and emotions or trap individuals into spirals of unhealthy consumption based on prior choices; it can enable targeting and specific appeals to vulnerable groups such as children and young people (Brooks et al., 2022; Kelly et al., 2021). Online platforms' data informed algorithmic ad and content placement can target an individual or group with streams of multiple advertisements for HFSS and ultra processed foods from the same and different brands where it infers that they might be interested or vulnerable to such advertisements (Northcott et al., 2025b). Moreover the seamless integration of marketing into apparently organic content on social media (such as influencer content), the integration of instantaneous purchase choices through 'buy now' buttons and co-promotions with online delivery platforms (like Uber and Deliveroo) further amplify the health-harming impacts of marketing through affordances specifically curated by online platforms (Bennett et al., 2024; Granheim et al., 2022; Haidar, 2024; Sing & Lyons, 2024).

3.2 Platform food advertising policies

To identify whether platforms are exercising due diligence to prevent and mitigate the adverse human rights impacts of algorithmic determinants of health, we con-

ducted an analysis of twelve major digital platforms and their respective food related advertising policies, if any. Platforms were selected for their dominance in either retail or social media markets. The social media platforms were chosen for their global popularity by the number of monthly active users, according to Statista (Dixon, 2025). In order these were Meta (Facebook, Instagram), Alphabet (YouTube), TikTok, Reddit, Pinterest and X. The retail platforms Alphabet (Google), Microsoft (Bing) and Amazon were also selected for their dominance in the search and display advertising markets. We also chose to include LinkedIn and Twitch in our study, with acknowledgement that these platforms differ slightly from the others examined. Messaging platforms like WhatsApp were excluded due to their limited advertising capabilities, as were platforms popular in China, due to the lack of materials available in English. Platform policies, where available, were found on the respective platforms' websites via internet search. We looked specifically for advertising policies that either restricted or completely prohibited ads promoting unhealthy diets, as well as broader policy approaches to other consumable products related to health like infant formula, alcohol and wellness products. We collected information on whether policies applied to ads seen by users of any age or only minors, as well as which countries advertisers were prevented from targeting. All policies were reviewed in May 2026. The results are summarised in Table 1. Our analysis revealed that most platforms have advertising policies prohibiting or restricting the promotion of products that can be detrimental to health, such as weight loss products and supplements, alcohol and tobacco, energy drinks, infant formula and herbal remedies claiming to cure disease (Sacks & Looi, 2020, p. 4, not shown in Table 1). Six platforms, Amazon, Alphabet (Google and YouTube), Pinterest, Reddit and TikTok have advertising policies regarding the marketing of foods that should be limited in healthy diets. The other six platforms have no relevant advertising policies or public statements.

TABLE
1:
Unhealthy
food
advertising
policies
across
12
major
digital
platforms
(May
2026)

PLATFORM*	PROHIBITED PRODUCTS	PLATFORM SPECIFIC NUTRITIONAL STANDARDS?	COUNTRIES WHERE ADS ARE PROHIBITED	USER AGE APPLICABILITY
Alphabet (Google Display Network – targets users across YouTube, Google Search, Gmail, Google Shopping, Google apps, various websites based on users' browsing history/cookies).	HFSS	Yes.	UK, EU	Under 18
Alphabet (YouTube Kids)	All food and beverage	N/A	All	Under 13
Amazon (retail search placement ads)	HFSS	No – refers to UK government guidance. ²	UK	All users
Pinterest	All food and beverage	No	Kazakhstan, Mongolia, Sri Lanka	All users
			Albania, Moldova, Uruguay	Under 18
Reddit	HFSS	No – refers to UK government guidance	UK	All users
TikTok - 'Traditional Advertising' policy (Ads published directly from a brand's TikTok account)	HFSS	No – refers generally to local regulations in target market.	Australia, Bulgaria, Ireland, New Zealand, Norway, Portugal, UK.	Under 18
	Energy drinks	No	Albania, Brunei, El Salvador, Ethiopia, Honduras, Kyrgyzstan, Laos, Libya, Mali, Mauritius, Monaco, Myanmar, Nicaragua, Senegal, Tanzania, Uganda.	All users
TikTok - 'Branded Content' policy (Ads created in collaboration with content creators)	HFSS	No – refers to local regulations in target market.	UK, Portugal, Norway, Ireland.	All users

2. <https://www.gov.uk/government/publications/restricting-promotions-of-products-high-in-fat-sugar-or-salt-by-location-and-by-volume-price/restricting-promotions-of-products-high-in-fat-sugar-or-salt-by-location-and-by-volume-price-implementation-guidance>

PLATFORM*	PROHIBITED PRODUCTS	PLATFORM SPECIFIC NUTRITIONAL STANDARDS?	COUNTRIES WHERE ADS ARE PROHIBITED	USER AGE APPLICABILITY
	Energy drinks	No	Bangladesh	All users
* No specific food policy found on Bing, Facebook, Instagram, X, LinkedIn, Twitch.				

3.3 HRBA evaluation of policies

The policies found on these six platforms mostly focus on ‘HFSS foods’, with restrictions only applying in certain jurisdictions or for users under 18 (under 13 for YouTube Kids). This is likely because of advertising regulations in local target markets. Alphabet’s HFSS policy, which targets UK and EU users, was introduced in 2020 and appears to be a response to the EU’s Audiovisual Media Services Directive 2018/1808 (‘AMSD’) 2018 update, which now regulates ads on online video sharing platforms, as well as television and radio. Amazon, Reddit and TikTok’s HFSS policies, which target only UK users, were implemented over the past two years, and a clear response to the advertising restrictions recently introduced in the UK (both legislative schemes are discussed further below in section 4.1.)

The patchy application of these policies suggests carefully calculated judgments as to where the risk of stricter regulation or reputational backlash is heightened, and how to most strategically adjust their business practices to enable continued market access. YouTube Kids, for example, is aimed at creating a trusted channel intended to secure Alphabet’s access to and continued dominance in the marketing of on demand video content, including advertising, to children, at a time when there is heightened concern about harm to children online (Burroughs, 2017; Ørmen & Gregersen, 2022). Alphabet has argued (unsuccessfully) that its provision of YouTube Kids as a safe space for children should insulate it from regulatory restrictions, such as the Australian prohibition on allowing under 16s onto social media platforms (Butler, 2025). But the loopholes in these self-regulatory policies are many. For example, the policy as to which ads can be shown to under 18s on Alphabet platforms is only effective if users are logged in and self-declare their age accurately (Boyland et al., 2025b; Sacks & Looi, 2020). There is no evidence of consultation with users or human rights experts about respecting the right to health online, or transparent reporting about how it is being achieved, as would be required by a HRBA.

TikTok’s approach depends on whether an ad is officially promoted by a brand’s

own account ('traditional advertising') or developed and posted by a content creator ('influencer' marketing). TikTok's more extensive restrictions on creator content apply only in jurisdictions with laws prohibiting unhealthy food marketing online (i.e. UK, Portugal, Norway – see Table 2 – and in Ireland, which also has a strong law prohibiting unhealthy food advertising, albeit not currently applicable to online content). None of these laws currently apply to platforms, only to advertisers. Nevertheless, it appears that TikTok has made a strategic decision to go 'beyond compliance' and use its leveraging power to ensure food advertisers comply with any relevant food advertising restrictions on its platform. This may be an effort to show it is a good citizen to protect market access in contexts where serious concerns have been raised about Tik Tok's data privacy and security (Juned, 2023). A HRBA would require platforms to use their leveraging power to ensure food brands do not engage in health demoting marketing regardless of national legislation.

Across each platform the policies focus narrowly on HFSS foods and in some cases energy drinks (see Table 1). The meaning and application of these definitions relies on a double layer of largely unaccountable self-regulation: first the platforms determine for themselves what ads they will and will not allow; second the platforms rely on food brands to self-declare the nutritional content of each product advertised and whether it complies with the platform's policy.

In each case, the platforms' focus on restricting HFSS foods is unduly technical and narrow: They focus on specific nutrient profiles, and fail to address other categories of advertising that contribute to a health-demoting food environment, such as brand advertising that does not explicitly visually depict a product (for example, an ad with the KFC logo but no pictures of chicken), and which may use sports, mental health, or green themes to legitimate and socially license or 'wash' brands promoting an unhealthy diet (Northcott et al., 2025b).

Platforms' reliance on food brands self-certifying their own compliance with the policies logically leaves significant scope for serious bias. Brands have little incentive to fully comply with policies that would reduce the number of people served their ads, and they do not publicly report on the extent to which they enforce compliance or the impact of their policies on users' experiences and whether they contribute to an overall healthier online environment. For these policies to work, platforms would need to have effective technical systems in place that consistently detect and pause ads that do not comply with the policy without overreach into other categories. However, platforms' automated ad review systems, like their content moderation systems, are infamous for being error prone, either over or under

inclusive (Castets-Renard, 2020), and anecdotal reports from Amazon advertisers reflect significant contention over some decisions made, such as blocking ads for products that are not HFSS foods, like black tea or supplements (Seller_mblkluVd-nTyll, 2022).

Platform transparency and accountability for how the system that sells and places advertising is also lacking. While some platforms upload ads to voluntary ad repositories, it is more often that platforms only do this when required by law, such as under the European Union's DSA, but even then, platforms are only obligated to publish advertisements shown in the EU. There is no evidence to suggest that, as per their responsibility under the Guiding Principles, platforms are using this data to identify, measure or remedy flows of ads promoting unhealthy diets across their networks, nor that they engage with users or human rights experts on these issues. Should platform users feel they are being inappropriately targeted by ads that might be health demoting, the onus is on them to track their own digital behaviour to tweak their algorithmic experience or report the ads for violation of advertising policies. While some platforms do make settings available to adjust one's interests or opt out of unwanted advertising and other content, previous research has shown that such facilities are typically hidden under layers of instructions and click-throughs that make them difficult to find and use effectively, with most individuals giving up on the process (Burgess et al., 2024).

We conclude that the major digital platforms are not fulfilling their obligation to respect the right to health because they are not exercising due diligence to ensure their policies and models prevent and mitigate health demoting online marketing by food brands. Moreover platforms are adding to the health demoting online marketing through the cumulation of multiple ads from multiple brands on the same feeds. The modest self-regulated advertising policy adjustments that *have* been made demonstrate that change will only occur in response to government intervention, whose role we turn to next.

Government responsibilities

4.1 Evaluation of existing government restrictions on unhealthy food advertising (UK and EU)

Despite guidance from the World Health Organisation (WHO) calling for mandatory food and beverage advertising prohibitions, at least for child audiences (WHO, 2022, 2023; WHO & UNICEF, 2023), most nations continue to rely on self-regulatory advertising codes or a combination of voluntary and mandatory restrictions

(Reeve & Magnusson, 2024). Traditional approaches to restricting exposure to unhealthy food marketing, such as not showing certain ads during times when children watch television and regulating misleading or unfair content, are largely meaningless given the penetration of digital devices into every aspect of most individuals' (including children's) lives and the the dynamic, algorithmic flows of content on individual devices.

In the EU the AMSD, which restricts unhealthy food advertising for minors, now includes video sharing platforms like YouTube, but any practical implementation requires the cooperation of both member states and platforms (Grammatikaki et al., 2019). Compliance with this directive has been poor, with the European Commission reporting that only half of the EU's member states implemented any kind of co-regulatory or self-regulatory advertising laws within the first five years (European Commission, 2020). In 2007 the EU adopted a voluntary corporate 'pledge' which several major multinational food companies signed, promising not to advertise products to audiences under 13 years old, including on social media platforms, video-sharing platforms, and other online sites (European Commission & Ipsos, 2023). However, it has numerous loopholes. For example, advertisers are exempt if their product meets the pledge's weak 'common nutrition criteria', which has allowed ads to run for products that do not meet nutrient profile models from the WHO Regional Office for Europe (Huizinga & Kruse, 2016) or the UK's Office of Communications ('Ofcom') (Landwehr & Hartmann, 2020).

Currently there are few countries that have moved to restrict or prohibit food advertisers from targeting online consumers. Those that have introduced legislation are shown in Table 2. Norway, Chile and Portugal have introduced specific legislation to restrict unhealthy food advertising online; however these focus only on protecting children or minors under the age of 18. Other countries like Ireland, Finland, Hungary, Sweden, Poland, the US, Canada and Australia utilise existing broadcast media legislation to restrict advertising across radio and television but are yet to extend this to digital advertising (Khan et al., 2024). Even Chile's recent food policy approach, one of the world's earliest and most comprehensive efforts to combat childhood obesity, confines the prohibition in broadcast legislation to 'child-directed' content, excluding much of the general content that is consumed by minors across platforms like YouTube, TikTok, and Twitch (Corvalán et al., 2019). Such regulation must bind platforms, not just advertisers, given it is the platforms that control the online marketing environment and their failure to exercise due diligence in relation to their human rights responsibilities, as argued above.

Moreover, given the pervasiveness of targeting and algorithmic modelling aimed

at finding and creating vulnerabilities, restrictions should not be confined only to protecting ‘credulous’ children. Young people and even adults’ right to health is affected by algorithmic determinants. The problem is a whole food marketing environment that helps constitute a food culture that is health demoting for all – for which both advertisers and platforms are responsible (Shaheed, 2014, paras 48, 50).

TABLE
2:
Countries
with
legislation
restricting
unhealthy
food
advertising
online
(*in
order
of
coming
into
force*)

COUNTRY	TITLE	CAME INTO FORCE	AGE OF AD BAN APPLICABILITY
Quebec	Consumer Protection Act 1980	30 April 1980	<13
Chile	Law 20.606 On the Nutritional Composition of Foods and their Advertising 2012	27 June 2016	<14 or where 20% of audience is children
Portugal	Law no. 30/2019	23 April 2019	<16
Norway	Regulation on the prohibition of marketing certain food products particularly directed at children	25 April 2025	<18
United Kingdom	Communications Act 2003 via The Advertising (Less Healthy Food Definitions and Exemptions) Regulations 2024	5 Jan 2026	All
Denmark	Danish Marketing Practices Act (<i>forthcoming</i>)	N/A	<15

To date, the most significant measure addressing food advertising online is that which recently unfolded in the UK. On 5 January 2026, amendments to the nation's Communications Act 2003 imposed a complete ban on paid-for digital advertising depicting 'less healthy food' (LHF) for all users living in the UK. This ban prevents advertisers from targeting platform users of *any* age if their product meets the LHF nutritional criteria (a test set out by the UK's Committee of Advertising Practice). While Alphabet, Amazon, TikTok and Reddit have implemented UK-based food advertising policies (as discussed in 3.2), it is the advertisers, not the platforms delivering the ads, who are the target of this legislation. Under this legislation platforms themselves are under no mandatory obligations to leverage their power to ensure advertisers comply. Critics are also reticent to proclaim the regulation a success since, after consistent industry lobbying, brand advertising is exempt from the restrictions, allowing food companies to continue using logos, livery, jingles, fonts, colour schemes and characters to market themselves (Committee of Advertising Practice, 2025), as long as they do not feature any pictures of LHF products (Boyland et al., 2025b). This kind of marketing can be just as damaging, for example by associating unhealthy diets with popular sports teams and mental health charities (Northcott et al., 2025b) and has been shown to adversely affect what children subsequently eat (Boyland et al., 2025a). The brand marketing exemption, according to some, renders the legislation entirely ineffective (Boyland et al., 2025b).

4.2 Evaluation of government approaches to regulating platforms: Due diligence and duty of care obligations in the context of online food environments

We turn next to legislation requiring platforms generally to show due diligence or a duty of care in relation to content. These laws are relevant as they represent significant examples of governments attempting to protect individuals from the actions of platforms and requiring certain due diligence steps by platforms. We evaluate whether two new regimes sufficiently address the requirements of our HRBA for regulating health demoting food advertising online. First we address the UK Online Safety Act (OSA), which we argue is unduly narrow, and second the EU Digital Services (DSA), which we argue is a potentially more salient model.

UK Online Safety Act

Under the UK OSA platforms owe several distinct 'duties of care' to prevent 'illegal' or 'harmful' content from appearing on their networks. Illegal content refers to content related to certain very serious criminal conduct such as terrorism, hate

crimes, harassment, human trafficking, fraud and other risks to personal and financial safety, as well as certain other less serious but still harmful content such as encouraging self-harm, sending death threats and cyberflashing (Ofcom, 2024; 2026). Shielding children from age-inappropriate harmful content like pornography as well as content promoting harmful behaviours like eating disorders and bullying is another key focus (Ofcom, 2025). Platforms must undertake risk assessments to identify the likelihood of such content appearing on their services, and are subject to notice-and-take down provisions, which require them to take proportionate steps to remove infringing content when they become aware of its existence, broadly in line with due diligence type principles.

Critics argue the scheme's efficacy is limited, as despite its initial promise to take a broader preventative, safety-by-design systems approach (Nash & Felton, 2024), the final regulation is a largely reactive, content-first approach (Farthing & Woods, 2024). The establishment of multiple duties of care means that some harms, not conceived of at the time of drafting, may slip through the cracks (Farthing & Woods, 2024). More broadly, the concept of harm articulated in the legislation is narrowly construed to focus on harms suffered by *individuals*, tackling content that may cause direct physical or psychological harm, rather than content linked to broader societal or systemic harms (Farrand, 2024). As a result, the cumulative impact of algorithmic advertising of many separate food ads that have the effect of promoting and normalising unhealthy diets is not covered, despite the recent UK legislation restricting that content online (discussed immediately above).

EU Digital Services Act

The EU DSA adopts a due diligence approach that is broader than the UK's duty of care model, and as such, offers more potential to regulate algorithmic health demoting food marketing. While the UK focuses on proactive platform obligations in relation to a relatively narrow spectrum of illegal and harmful content, the DSA emphasises broader platform transparency, accountability, and systemic risk assessment and mitigation. The DSA is strongly grounded in human rights law instruments, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights.

The DSA requires very large online platforms³ to 'diligently identify, analyse and assess any systemic risks... stemming from the design or functioning of their service and its related systems, including algorithmic systems, or from the use made

3. Those with more than 45 million monthly users in the EU, which includes all the digital platforms discussed in this paper.

of their services' (DSA Article 34). Platforms must also 'put in place reasonable, proportionate and effective mitigation measures, tailored to the specific systemic risks identified' (DSA Article 35). The risk assessment and mitigation obligations are expressed as due diligence type obligations and apply to four categories of systemic risks: (i) the dissemination of illegal content; (ii) any actual or foreseeable negative effects for the exercise of fundamental rights (including freedom of expression, but also protection of personal data and a high level of consumer protection); (iii) any actual or foreseeable negative effects on civic discourse and electoral processes, and public security; (iv) any actual or foreseeable negative effects in relation to gender-based violence, the protection of public health and minors and serious negative consequences to the person's physical and mental well-being (DSA Article 34(1)). The rights to be protected by the DSA engage not only the protection of individual safety but 'societal and economic harm', particularly that which may arise in relation to the use of very large platforms and online services, where it is noted that the way in which services are designed 'is generally optimised to benefit their own advertising-driven business models and can cause societal concerns' (DSA Article 79).

In addition, platforms are obligated to enable greater transparency and accountability of their advertising and algorithmic curation systems by making available 'repositories' of the ads they publish in the EU and some information about how the ads were targeted (DSA Articles 26, 39, 40). The DSA also requires increased transparency to individual users about individual ads, why they saw them, and how to restrict or reduce which ads they see (DSA Article 26). Like the OSA, the DSA also obligates platforms to take down illegal content, upon receiving notice that the content is illegal, and creates systems for regulators and civil society organisations to notify them of illegal content (DSA Articles 9, 10). The definition of 'illegal content' is however much broader than that adopted by the OSA, as it covers all unlawful content, not just criminal content, whether EU or member state law and 'irrespective of the precise subject matter or nature of that law' (DSA Article 3; see also Law, 2024). This broader approach would include any food ads that make false and misleading health claims, as well as those breaching any new legislative restrictions on unhealthy food marketing, such as those in Portugal (discussed above).

However, these obligations are still limited. For example, what is in platforms' published ad repositories and who they are available to is quite narrow (Leerssen, 2024). Nor do the required ad repositories enable individuals, civil society, regulators or researchers to see how ads actually appear in an algorithmic flow to differ-

ent people and groups of people, nor how the algorithm personalises and targets these flows to individuals in practice. The focus remains more on identifying dangerous targeting of specific demographics initiated by advertisers. It does not respond to platform control of and responsibility for algorithmic systems that autonomously create targeting and personalisation strategies (Carah & Brodmerkel, 2021). That is, even the DSA does not sufficiently recognise that it is not just advertisers but platforms themselves that can be responsible for an overall health demoting online environment. Moreover, the DSA due diligence obligations are also limited in that they rely on self- and co-regulation with best practices set out in voluntary codes of practice co-created by industry, civil society and government. While independent auditing is required, the DSA relies largely on platforms themselves to identify the risks and ways to mitigate them, which is a weaker system for accountability than if the state had a role in determining risk and mitigation strategies (Jaursch, 2024).

In sum, while the DSA is more promising than the OSA, both approaches to regulating platform responsibilities are likely to focus on preventing the most egregious harms, rather than more fulsomely addressing the health-demoting impacts of algorithmic systems and their underlying business models. Nevertheless, the DSA goes some way towards legislating a basis for mandatory platform responsibilities to exercise due diligence to prevent health demoting online environments.

Conclusion

Digital platforms' marketing, promotion and enablement of immediate order and delivery of food that characterises unhealthy diets, combined with their capacity to target groups, makes the online environment a powerful influence on dietary choices. The algorithmic determinants of health consist of the content in individual ads, marketing and branding strategies by food advertisers, and the cumulative impact of the content enabled and amplified by algorithmic commercial cultures that together create an unhealthy online food environment. In this paper we have shown how an international human rights based analysis, centred on the right to health, can guide how governments and platforms should address the algorithmic determinants of health in relation to corporate food marketing to help people make healthier dietary choices.

Since states have a duty to protect (and fulfil) the right to health, while platforms and advertisers are responsible to respect that right, we can use a human rights-based approach to evaluate both platform (self-regulatory) policies and actions and state action (actual and proposed) in digital platform regulation. Current ap-

proaches to platform governance are limited by their narrow ‘safety’ framing, undue concern with freedom of expression concerns largely inapplicable to corporate advertising under human rights law, and reliance on platform self-regulation which focuses largely on moderating user-generated content. However emerging due diligence and digital duty of care approaches recognise that platforms have a responsibility to prevent and mitigate a health demoting online food advertising environment. Nevertheless, stronger coordinated state action is necessary to realise that right. This requires states to regulate and restrict health-demoting online food advertising by food brands. Importantly it also requires states to regulate advertiser-funded platforms and the way their algorithmic practices create unhealthy online environments above and beyond the impact of individual brand campaigns.

While this article is centred on a human right to health-based approach to corporate food marketing, its approach and argument could be extended to other areas where platform governance impacts on economic, social and cultural rights. For example, advertising that promotes unhealthy diets may often occur alongside the marketing of harmful commodities like alcohol and gambling such as in sports spectatorship linked campaigns. A HRBA can also clarify where regulation and governance is required, despite blanket claims of freedom of speech barring the regulation of platforms. In further work, our HRBA could also be extended to argue that states should be responsible to develop or fund the development of public, participatory platforms in which economic, cultural and social rights of all kinds can be fully realised and protected and where commercial marketing is not allowed.

References

- Assenza, E. (2024). From “soft” international law to national law: Guiding principles in mandatory national legislation on human rights due diligence. *Spanish Journal of Business and Human Rights*, 2, 65–96. <https://doi.org/10.69592/3020-1004-N2-ENERO-2024-ART4>
- Aswad, E. (2018). The future of freedom of expression online. *Duke Law & Technology Review*, 17(1), 26–70.
- Baker, P., Slater, S., White, M., Wood, B., Contreras, A., Corvalán, C., Gupta, A., Hofman, K., Kruger, P., Laar, A., Lawrence, M., Mafuyeka, M., Mialon, M., Monteiro, C. A., Nanema, S., Phulkerd, S., Popkin, B. M., Serodio, P., Shats, K., ... Barquera, S. (2025). Towards unified global action on ultra-processed foods: Understanding commercial determinants, countering corporate power, and mobilising a public health response. *The Lancet*, 406(10520), 2703–2726. [https://doi.org/10.1016/S0140-6736\(25\)01567-3](https://doi.org/10.1016/S0140-6736(25)01567-3)

Beauvisage, T., & Mellet, K. (2023). Building compliance, manufacturing nudges: The complicated trade-offs of advertising professionals facing the GDPR. In J. Katz, K. Schiepers, & J. Floyd (Eds), *Nudging choices through media: Ethical and philosophical implications for humanity* (pp. 195–205). Springer International Publishing. https://doi.org/10.1007/978-3-031-26568-6_10

Benesch, S. (2020). But Facebook's not a country: How to interpret human rights law for social media companies. *Yale Journal on Regulation Bulletin*, 38, 86–111.

Bennett, R., Keeble, M., Zorbas, C., Sacks, G., Driessen, C., Grigsby-Duffy, L., Adams, J., Burgoine, T., & Backholer, K. (2024). The potential influence of the digital food retail environment on health: A systematic scoping review of the literature. *Obesity Reviews*, 25(3), e13671. <https://doi.org/10.1111/obr.13671>

Boyland, E., Davies, N., Wilton, M., Jones, A., Maden, M., Curtis, F., Evans, R., Finlay, A., McGale, L., Cerny, C., Pajda, N., & Rose, A. K. (2025). Impact of food, beverage, and alcohol brand marketing on consumptive behaviors and health in children and adults: A systematic review and meta-analysis. *Obesity Reviews*, 26(9), e13932. <https://doi.org/10.1111/obr.13932>

Boyland, E., McGale, L., Maden, M., Hounsborne, J., Boland, A., & Jones, A. (2022). Systematic review of the effect of policies to restrict the marketing of foods and non-alcoholic beverages to which children are exposed. *Obesity Reviews*, 23(8), e13447. <https://doi.org/10.1111/obr.13447>

Boyland, E., Muc, M., Coates, A., Ells, L., Halford, J. C. G., Hill, Z., Maden, M., Matu, J., Maynard, M. J., Rodgers, J., Targett, V., Tatlow-Golden, M., Young, M., & Jones, A. (2025). Food marketing, eating and health outcomes in children and adults: A systematic review and meta-analysis. *British Journal of Nutrition*, 133(6), 781–805. <https://doi.org/10.1017/S0007114524000102>

Brooks, R., Christidis, R., Carah, N., Kelly, B., Martino, F., & Backholer, K. (2022). Turning users into 'unofficial brand ambassadors': Marketing of unhealthy food and non-alcoholic beverages on TikTok. *BMJ Global Health*, 7(6), e009112. <https://doi.org/10.1136/bmjgh-2022-009112>

Brown, M.-G., Carah, N., Robards, B., Dobson, A., Rangiah, L., & De Lazzari, C. (2024). No targets, just vibes: Tuned advertising and the algorithmic flow of social media. *Social Media + Society*, 10(1), 1–15. <https://doi.org/10.1177/20563051241234691>

Burroughs, B. (2017). YouTube Kids: The app economy and mobile parenting. *Social Media + Society*, 3(2). <https://doi.org/10.1177/2056305117707189>

Butler, J. (2025, July 27). YouTube makes last-ditch attempt to lobby government against inclusion in under-16s social media ban. *The Guardian*. <https://www.theguardian.com/australia-news/2025/jul/27/google-canberra-event-as-youtube-lobbies-against-inclusion-in-australian-under-16s-social-media-ban>

Cámara, M., Giner, R. M., González-Fandos, E., López-García, E., Mañes, J., Portillo, M. P., Rafecas, M., Domínguez, L., & Martínez, J. A. (2021). Food-based dietary guidelines around the world: A comparative analysis to update AESAN Scientific Committee dietary recommendations. *Nutrients*, 13(9), 3131. <https://doi.org/10.3390/nu13093131>

Carah, N., & Brodmerkel, S. (2021). Alcohol marketing in the era of digital media platforms. *Journal of Studies on Alcohol and Drugs*, 82(1), 18–27. <https://doi.org/10.15288/jsad.2021.82.18>

Carah, N., Hayden, L., Brown, M.-G., Angus, D., Brownbill, A., Hawker, K., Tan, X. Y., Dobson, A., & Robards, B. (2024). Observing “tuned” advertising on digital platforms. *Internet Policy Review*, 13(2). <https://doi.org/10.14763/2024.2.1779>

Carolan, M. (2018). Big data and food retail: Nudging out citizens by creating dependent consumers.

Geoforum, 90, 142–150. <https://doi.org/10.1016/j.geoforum.2018.02.006>

Castets-Renard, C. (2020). Algorithmic content moderation on social media in EU law: Illusion of perfect enforcement. *University of Illinois Journal of Law, Technology and Policy*, 20(2), 283–323. <https://doi.org/10.2139/ssrn.3535107>

CESCR (United Nations Committee on Economic, Social and Cultural Rights). (2000). *General comment No. 14: The right to the highest attainable standard of health (art. 12)*. United Nations. <https://docs.un.org/en/E/C.12/2000/4>

CESCR (United Nations Committee on Economic, Social and Cultural Rights). (2017). *General comment No. 24 (2017) on state obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities*. United Nations. <https://docs.un.org/en/E/C.12/GC/24>

Committee of Advertising Practice. (2025). *Advertising of less healthy food and drink products: Advertising guidance (broadcast and nonbroadcast)* (pp. 1–23). Advertising Standards Authority. <https://www.asa.org.uk/static/98d383af-0e0c-4fbe-9c920927a369c112/Less-healthy-foods-advertising-guidance.pdf>

Corvalán, C., Reyes, M., Garmendia, M. L., & Uauy, R. (2019). Structural responses to the obesity and non-communicable diseases epidemic: Update on the Chilean law of food labelling and advertising. *Obesity Reviews*, 20(3), 367–374. <https://doi.org/10.1111/obr.12802>

Crain, M. (2021). *Profit over privacy: How surveillance advertising conquered the internet*. University of Minnesota Press. <https://doi.org/10.5749/j.ctv20zbktm>

Dicken, S. J., Jassil, F. C., Brown, A., Kalis, M., Stanley, C., Ranson, C., Ruwona, T., Qamar, S., Buck, C., Mallik, R., Hamid, N., Bird, J. M., Brown, A., Norton, B., Gandini Wheeler-Kingshott, C. A. M., Hamer, M., van Tulleken, C., Hall, K. D., Fisher, A., ... Batterham, R. L. (2025). Ultraprocessed or minimally processed diets following healthy dietary guidelines on weight and cardiometabolic health: A randomized, crossover trial. *Nature Medicine*, 31, 3297–3308. <https://doi.org/10.1038/s41591-025-03842-0>

Dong, T. (2026, December 3). *Most popular social networks worldwide as of October 2025, by number of monthly active users (in millions)*. Statista. <https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>

Dunford, E. K., Kelly, B., & Jones, A. (2024). Could Google help curb online advertising of unhealthy foods to U.S. children? *American Journal of Preventive Medicine*, 66(1), 64–72. <https://doi.org/10.1016/j.amepre.2023.08.014>

Egan, S. (2018). The doctrinal approach in international human rights law scholarship. In L. McConnell & R. Smith (Eds), *Research methods in human rights* (pp. 24–41). Routledge.

Elver, H. (2016). *Interim report of the Special Rapporteur on the right to food (A/71/282)*. United Nations. <https://docs.un.org/en/A/71/282>

European Commission. (2020). *Reporting on the application of Directive 2010/13/EU 'Audiovisual Media Services Directive' for the period 2014-2019*. Publications Office of the European Union.

European Commission: Directorate-General for Health and Food Safety & IPSOS. (2023). *Study on commitments pledged under the EU code of conduct on responsible food business and marketing practices*. Publications Office of the European Union. <https://doi.org/10.2875/373297>

European Parliament and Council. (2018). *Directive (EU) 2018/1808 of the European Parliament and of*

the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in member states concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities. <https://eur-lex.europa.eu/eli/dir/2018/1808/oj>

European Parliament and Council. (2022). *Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a single market for digital services and amending Directive 2000/31/EC (Digital Services Act)*. <https://eur-lex.europa.eu/eli/reg/2022/2065/oj>

Evans, R., Christiansen, P., Masterson, T., Barlow, G., & Boyland, E. (2024). Food and non-alcoholic beverage marketing via Fortnite streamers on Twitch: A content analysis. *Appetite*, 195, 107207. <http://doi.org/10.1016/j.appet.2024.107207>

Fakhri, M. (2025). *Corporate power and human rights in the food system* (A/80/213; Report of the Special Rapporteur on the Right to Food). United Nations. <https://docs.un.org/en/A/80/213>

Farrand, B. (2024). How do we understand online harms? The impact of conceptual divides on regulatory divergence between the Online Safety Act and Digital Services Act. *Journal of Media Law*, 16(2), 240–262. <https://doi.org/10.1080/17577632.2024.2357463>

Farthing, R., & Woods, L. (2024, April 22). The dangers of pluralisation: A singular duty of care in the Online Safety Act. *The Policymaker*. <https://thepolicymaker.appi.org.au/the-dangers-of-pluralisation-a-singular-duty-of-care-in-the-online-safety-act-2/>

Goldenfein, J., Weatherall, K. G., & Parker, C. (2021). *Online Privacy Bill consultation submission* (SSRN Scholarly Paper No. 4015915). Social Science Research Network. <https://doi.org/10.2139/ssrn.4015915>

Gomez, D. (2014). *The right to food and the responsible governance of tenure: A dialogue towards implementation*. Food and Agricultural Organization of the United Nations. <https://www.fao.org/4/i3170e/i3170e.pdf>

Goodwin, I. (2022). Programmatic alcohol advertising, social media and public health: Algorithms, automated challenges to regulation, and the failure of public oversight. *International Journal of Drug Policy*, 109, 103826. <https://doi.org/10.1016/j.drugpo.2022.103826>

Grammatikaki, Evangelia, Sarasa-Renedo, Ana, Maragkoudakis, Petros, Wollgast, Jan, & Caldeira, Sandra. (2019). *Marketing of food, non-alcoholic, and alcoholic beverages: A toolkit to support the development and update of codes of conduct*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2760/20329>

Granheim, S. I., Løvhaug, A. L., Terragni, L., Torheim, L. E., & Thurston, M. (2022). Mapping the digital food environment: A systematic scoping review. *Obesity Reviews*, 23(1), e13356. <https://doi.org/10.1111/obr.13356>

Haidar, J. (2024). Unpacking the business model: Food delivery platforms as ‘multiple market makers’. *Platforms & Society*, 1, 1–13. <https://doi.org/10.1177/29768624241298782>

Huizinga, O., & Kruse, M. (2016). Food industry self-regulation scheme “EU Pledge” cannot prevent the marketing of unhealthy foods to children. *Obesity Medicine*, 1, 24–28. <https://doi.org/10.1016/j.obmed.2016.01.004>

Jaurisch, J. (2024). *What DSA codes of conduct for online advertising can achieve* (pp. 1–53). Interface EU. <https://www.interface-eu.org/publications/dsa-advertising-codes>

Joseph, S., & Kyriakakis, J. (2023). From soft law to hard law in business and human rights and the

challenge of corporate power. *Leiden Journal of International Law*, 36(2), 335–361. <https://doi.org/10.1017/S0922156522000826>

Juned, M., Maryam, S., Salam, S., & Utami, R. A. A. (2023). TikTok's conflict of interest with the US government: Between big data security and economics (2017-2023). *European Journal of Communication and Media Studies*, 2(4). <https://doi.org/10.24018/ejmedia.2023.2.4.23>

Kaye, D. (2022). *Human rights standards should guide company decisions* (UC Irvine School of Law Research Paper No. 36). Social Science Research Network. <https://papers.ssrn.com/abstract=4246044>

Kelly, B., Bosward, R., & Freeman, B. (2021). Australian children's exposure to, and engagement with, web-based marketing of food and drink brands: Cross-sectional observational study. *Journal of Medical Internet Research*, 23(7), 1–15. <https://doi.org/10.2196/28144>

Kenworthy, N., Storeng, K. T., & Zenone, M. (2023). The global technology sector as a commercial determinant of health. In N. Maani, M. Petticrew, & S. Galea (Eds), *The commercial determinants of health* (pp. 197–206). Oxford University Press. <https://doi.org/10.1093/oso/9780197578742.003.0020>

Khan, R., Suggs, L. S., Tanweer, A., & Bányai, G. (2024). Food advertisement and marketing policies aimed at reducing childhood obesity: A review of existing regulations in high-income countries. *Public Health Reviews*, 45, 1607103. <https://doi.org/10.3389/phrs.2024.1607103>

Kickbusch, I., & Holly, L. (2023). Addressing the digital determinants of health: Health promotion must lead the charge. *Health Promotion International*, 38(3), daad059. <https://doi.org/10.1093/heapro/daad059>

Landwehr, S. C., & Hartmann, M. (2020). Industry self-regulation of food advertisement to children: Compliance versus effectiveness of the EU Pledge. *Food Policy*, 91, 101833. <https://doi.org/10.1016/j.foodpol.2020.101833>

Law, S. (2024). Effective enforcement of the Online Safety Act and Digital Services Act: Unpacking the compliance and enforcement regimes of the UK and EU's online safety legislation. *Journal of Media Law*, 16(2), 263–300. <https://doi.org/10.1080/17577632.2025.2459441>

Leerssen, P. (2024). Outside the black box: From algorithmic transparency to platform observability in the Digital Services Act. *Weizenbaum Journal of the Digital Society*, 4(2), Article 2. <https://doi.org/10.34669/wi.wjds/4.2.3>

Lyons, A. C., Goodwin, I., Carah, N., Young, J., Moewaka Barnes, A., & McCreanor, T. (2022). Limbic platform capitalism: Understanding the contemporary marketing of health-demoting products on social media. *Addiction Research & Theory*, 31(3), 178–183. <https://doi.org/10.1080/16066359.2022.2124976>

Macchi, C., & Bright, C. (2020). Hardening soft law: The implementation of human rights due diligence requirements in domestic legislation. In M. Buscemi, N. Lazzerini, L. Magi, & D. Russo (Eds), *Legal sources in business and human rights* (1st edn, pp. 218–247). Brill. https://doi.org/10.1163/9789004401181_012

MacKenzie, D., Caliskan, K., & Rommerskirchen, C. (2023). The longest second: Header bidding and the material politics of online advertising. *Economy and Society*, 52(3), 554–578. <https://doi.org/10.1080/03085147.2023.2238463>

McCorquodale, R., & Nolan, J. (2021). The effectiveness of human rights due diligence for preventing business human rights abuses. *Netherlands International Law Review*, 68(3), 455–478. <https://doi.org/10.1017/S0167454421000111>

ps://doi.org/10.1007/s40802-021-00201-x

Meta. (2024, October 23). *Sizzling marketing insights from Meta's restaurant summit*. Meta for Business. <https://www.facebook.com/business/news/marketing-insights-meta-restaurant-summit>

Mofokeng, T. (2023). *Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health* (A/78/185). United Nations. <https://documents.un.org/doc/undoc/gen/n23/208/05/pdf/n2320805.pdf>

Monteiro, C. A., Cannon, G., Levy, R. B., Moubarac, J.-C., Louzada, M. L., Rauber, F., Khandpur, N., Cediel, G., Neri, D., Martinez-Steele, E., Baraldi, L. G., & Jaime, P. C. (2019). Ultra-processed foods: What they are and how to identify them. *Public Health Nutrition*, 22(5), 936–941. <https://doi.org/10.1017/S1368980018003762>

Monteiro, C., Cannon, G., Levy, R., Claro, R., Moubarac, J.-C., Martins, A. P., Louzada, M. L., Baraldi, L., & Canella, D. (2012). The food system processing: The big issue for nutrition, disease, health, well-being. *World Nutrition*, 3(12), 527–569.

Montgomery, K., Chester, J., Nixon, L., Levy, L., & Dorfman, L. (2019). Big data and the transformation of food and beverage marketing: Undermining efforts to reduce obesity? *Critical Public Health*, 29(1), 110–117. <https://doi.org/10.1080/09581596.2017.1392483>

Moyn, S. (2018). *Not enough: Human rights in an unequal world*. Harvard University Press. <https://doi.org/10.2307/j.ctv24trcgs>

Nash, V., & Felton, L. (2024). Treating the symptoms or the disease? Analysing the UK Online Safety Act's approach to digital regulation. *Policy & Internet*, 16(4), 818–832. <https://doi.org/10.1002/poi.3404>

Northcott, T., Lawrence, M., Parker, C., Reeve, B., & Baker, P. (2025). Regulatory responses to ultra-processed foods are skewed towards behaviour change and not food system transformation. *Nature Food*, 6(3), 273–282. <https://doi.org/10.1038/s43016-024-01101-y>

Northcott, T., Sievert, K., Russell, C., Obeid, A., Angus, D., & Parker, C. (2025). Unhealthy food advertising on social media: Policy lessons from the Australian Ad Observatory. *Health Promotion International*, 40(2), daae192. <https://doi.org/10.1093/heapro/daae192>

Ofcom. (2024). *Overview of illegal harms*. Ofcom. <https://www.ofcom.org.uk/siteassets/resources/documents/online-safety/information-for-industry/illegal-harms/overview-of-illegal-harms.pdf?v=390985>

Ofcom. (2025). *Children's risk assessment guidance and children's risk profiles*. Ofcom. <https://www.ofcom.org.uk/siteassets/resources/documents/consultations/category-1-10-weeks/statement-protecting-children-from-harms-online/main-document/childrens-risk-assessment-guidance-and-childrens-risk-profiles.pdf?v=396653>

Ofcom. (2026). *Protecting people from illegal harms online: Illegal harms judgements guidance*. Ofcom. <https://www.ofcom.org.uk/siteassets/resources/documents/online-safety/information-for-industry/illegal-harms/updates/illegal-content-judgements-guidance.pdf?v=419967>

Office of the High Commissioner for Human Rights. (2009). *Business and human rights: Towards operationalizing the "protect, respect and remedy" framework: Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises* (Report A/HRC/11/13). United Nations Human Rights Council. <https://documents.un.org/doc/undoc/gen/g09/128/88/pdf/g0912888.pdf>

Office of the High Commissioner for Human Rights. (2024). *Access to remedy in cases of business-related human rights abuse: An interpretive guide*. United Nations. <https://www.ohchr.org/sites/default/files/2024-11/access-to-remedy-bhr-interpretive-guide-en.pdf>

Ørmen, J., & Gregersen, A. (2023). Towards the engagement economy: Interconnected processes of commodification on YouTube. *Media, Culture & Society*, 45(2), 225–245. <https://doi.org/10.1177/01634437221111951>

Paterson, J., Chang, S., Cheon, M., Culnane, C., & Dreyfus, S. (2022). The hidden harms of targeted advertising by algorithm and interventions from the Consumer Protection toolkit. *International Journal on Consumer Law and Practice*, 9(1), 1–24.

Patterson, D. (2024). Human rights-based approaches and the right to health: A systematic literature review. *Journal of Human Rights Practice*, 16(2), 603–623. <https://doi.org/10.1093/jhuman/huad063>

Reeve, B., & Magnusson, R. (2024). Reducing unhealthy food and beverage advertising to children: A framework for strengthening performance, transparency and enforcement. *Journal of Global Health Law*, 1(2), 229–256. <https://doi.org/10.4337/jghl.2024.02.05>

Robards, B., Carah, N., Rangiah, L., Roberts, S., De Lazzari, C., Brown, M.-G., Elliott, K., Tanner, C., Savic, M., & Dobson, A. (2023). *The social media & unhealthy marketing project: Final report*. Monash University, The University of Queensland & Vichealth. <https://espace.library.uq.edu.au/view/UQ:34f3ef1>

Ruggie, J. (2011). *Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises: Guiding principles on business and human rights: Implementing the United Nations “Protect, Respect and Remedy” framework* (Report A/HRC/17/31). United Nations Human Rights Council. <https://digitallibrary.un.org/record/705860>

Ruggie, J. G., & Sherman, J. F., III. (2017). The concept of ‘due diligence’ in the UN Guiding Principles on Business and Human Rights: A Reply to Jonathan Bonnitcha and Robert McCorquodale. *European Journal of International Law*, 28(3), 921–928. <https://doi.org/10.1093/ejil/chx047>

Sacks, G., & Looi, E. S. Y. (2020). The advertising policies of major social media platforms overlook the imperative to restrict the exposure of children and adolescents to the promotion of unhealthy foods and beverages. *International Journal of Environmental Research and Public Health*, 17(11), 4172. <https://doi.org/10.3390/ijerph17114172>

Seller_mblkuVdnTyII. (2025, July 17). *HFSS - Food (promotion and placement) regulations: Foods high in fat, salt and sugar* [Online forum post]. Amazon. <https://sellercentral.amazon.co.uk/seller-forums/discussions/t/1411b8a262509b09af09e61a84fab4f8>

Shaheed, F. (2014). *Report of the Special Rapporteur in the field of cultural right*. United Nations. <http://docs.un.org/en/A/69/286>

Sing, F., & Backholer, K. (2023). Strengthening global legislative actions to protect children from the harmful impacts of unhealthy food and non-alcoholic beverage marketing. *Current Obesity Reports*, 12(1), 1–9. <https://doi.org/10.1007/s13679-023-00492-6>

Sing, F., & Lyons, A. (2024). Regulating the digital environment to protect users from harmful commodity marketing. *Policy Quarterly*, 20(2), Article 2. <https://doi.org/10.26686/pq.v20i2.9483>

Skarstad, K. (2024). Critical human rights research. *Journal of Human Rights*, 23(3), 297–313. <http://doi.org/10.1080/14754835.2024.2354173>

Stalford, H., & Lundy, L. (2025). Whose business?: Protecting children's rights in the online environment. *The International Journal of Children's Rights*, 33, 1–4. <https://doi.org/10.1163/15718182-33010011>

Tatlow-Golden, M., & Garde, A. (2020). Digital food marketing to children: Exploitation, surveillance and rights violations. *Global Food Security*, 27, 100423. <https://doi.org/10.1016/j.gfs.2020.100423>

UK Public General Acts. (n.d.). *Online Safety Act 2023 (UK)*, c.50. Legislation.gov.uk. Retrieved <https://www.legislation.gov.uk/ukpga/2023/50>

UNICEF. (2018). *A child rights-based approach to food marketing: A guide for policy makers*. UNICEF. https://www.unicef.org/media/139591/file/A_Child_Rights-Based_Approach_to_Food_Marketing.pdf

United Nations. (1966a, December 16). *International Covenant on Civil and Political Rights*. 999 UNTS 171. <https://www.ohchr.org/sites/default/files/ccpr.pdf>

United Nations. (1966b, December 16). *International Covenant on Economic, Social and Cultural Rights*. 993 UNTS 3. <https://www.ohchr.org/sites/default/files/cescr.pdf>

Valero-Morales, I., Nieto, C., García, A., Espinosa-Montero, J., Aburto, T. C., Tatlow-Golden, M., Boyland, E., & Barquera, S. (2023). The nature and extent of food marketing on Facebook, Instagram, and YouTube posts in Mexico. *Pediatric Obesity*, 18(5), e13016. <https://doi.org/10.1111/ijpo.13016>

van Tulleken, C. (2024). *Ultra-processed people: Why do we all eat stuff that isn't food... and why can't we stop?* Penguin Books.

World Health Organization. (2016). *Tackling food marketing to children in a digital world: Trans-disciplinary perspectives*. World Health Organization. <https://iris.who.int/bitstream/handle/10665/344003/9789289052177-eng.pdf>

World Health Organization. (2023). *Policies to protect children from the harmful impact of food marketing: WHO guideline*. World Health Organization. <https://iris.who.int/server/api/core/bitstreams/83384c03-84a0-4db8-b1eb-cedc626257a6/content>

World Health Organization Regional Office for Europe. (2022). *Understanding the digital media ecosystem. How the evolution of the digital marketing ecosystem impacts tobacco, alcohol and unhealthy food marketing*. World Health Organization. <https://iris.who.int/bitstream/handle/10665/355277/9789289057950-eng.pdf>

World Health Organization & UNICEF. (2023). *Taking action to protect children from the harmful impact of food marketing: A child rights-based approach*. <https://iris.who.int/server/api/core/bitstreams/3524c021-4540-4374-af04-c234be9ff877/content>

Yeung, K. (2018). 'Hypernudge': Big data as a mode of regulation by design. In D. Beer (Ed.), *The social power of algorithms* (1st edn, pp. 118–136). Routledge.

Zenone, M., Kenworthy, N., & Maani, N. (2023). The social media industry as a commercial determinant of health. *International Journal of Health Policy and Management*, 12(1), 6840. <https://doi.org/10.34172/ijhpm.2022.6840>

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